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Instituto de Geofísica y Sismología

CASILLA 2777
SANTIAGO, CHILE

PROVISIONAL READINGS AT SANTIAGO
(SANTA LUCIA)

Jan.29 1960
eP 07 56 18
ePcP 57 19
e 59 14
eS 08 04 23
eScS 06 09
eQ 10 31
eR 14 05
Dilatation
Distance 60°
Slight depth

29
eP 12 24 43
iS 56
Dilatation
Distance 110 km

30
e 19 44 12

31
e 19 48 56

Feb. 1
e 02 54 20

1
e 07 17 56

2
e 07 09 32

2
eP 09 14 18
e 15 02
eS 08
Distance 400 km
Felt in Vallenar (IV)
Copiapó (V)

3
eP 04 44 00
e 54
ePcP 45 24
ePP 48
e(SSS) 57 00
eR 05 01 32
Distance 53,5° ?
Depth 100 km ?

3
e 16 52 38
e 54 08
eR 17 12 08

4
eP ~~04 02 24~~
e(P') 05 52
ePP 07 12
e(sPP) 07 48
e 13 26
e 14 36
eS 15 24
ePS 17 00
e 19,5
eSS! 23,7
eG 35,3
eR 44,5
SSH 45 u 48 sec
SSZ 7 u 48 sec
GH 75 u 52 sec
MH 65 u 28 sec
MZ 45 u 28 sec

5
eP 01 12 00
eS 16 00
e(SS) 36
Distance 22°

5
eS 20 54
e(SS) 21 36
Distance 22°

5
iP! 02 06 58
e 08 30
eS 10 55
e(SS) 11 36
Compression from S?W
PH 3,5 u 8 sec
PZ 3,1 u 8 sec
Distance 22°

5
eP 12 19 13
Local

7
e 04 47 08
e 51 00

7
eP 10 26 41
Local

7
e 11 53 42
e 59 08

8
eP 04 45 57
e 46 05
eS 10
Distance 110 km

8
iP 12 51 03
iS 55 23
eR 58,3
Compression from SW
PH 12 u 4 sec
PZ 13 u 4 sec
Distance 25,2°

8
eP 21 57 51
e 58 18
eS 34
e 59 00
Distance 400 km

9
eP 03 28 49
eS 29 01
Distance 100 km

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Santiago, Chile

PROVISIONAL READINGS AT SANTIAGO
(SANTA LUCIA)

Additional:

Jan.	31	e	05	24	36
	31	e		40	23
		e		43	05
		e		45	55
		e		50	35
		e(SS)		52	41
		e		54	37
		e	06	01	07
		e		03	23
		e(L)		22	16

Continuation:

Feb.	9	eP	04	16	33
		Local			
	9	e	13	07	43
		e		13	51
		e		18	46
		e		23	00
		e		26	11
	10	eP'	00	15	21
		e		16	51
		ePP		18	09
		ePKS			58
		e		20	21
		eSKS		22	45
		ePS		28	51
		ePPS		30	25
		e		31	53
		eSS		36	31
		eSSS		41,4	
		eQ		52--	
		Distance 142°			
		P'Z 2,5 u 10 sec			
		PPZ 3 u 8 sec			
	10	eP	21	50	38
		Local			
	10	eP	23	33	05
		ePP		36	37
		e		39	37
		e(SKS)		43	35
		eS		44	01
		ePS		45	05
		eSS		50	05
		eR	00	01	43
		Distance 90°			
	11	iP!	12	54	21
		eS			32
		Dilatation from S			
		Distance 90 km			
		Felt in Santiago Province(III-V), Valparaiso Prov. (II-III),Aconcagua Prov.(II-III), O'Higgins Prov.(II-V)			
	11	e(R)	21	47	47
	13	eP	10	59	27
		eS			46
		e			53
		Distance 130 km			
	13	eP	13	50	31
		Local			
	13	eP	16	00	44
		Local			
	13	iP	17	37	28
		e			36
		e			50
		iS			55
		Compression from N?E			
		Distance 220 km			
	13	eP	20	43	49
		eS		46	50
		e(SS)		47	20
		ePcP		48	41
		iScS		55	34
		Dilatation from N			
		SH 5,8 u 8 sec			
		Distance 16°			
		Depth 180 km			
	14	iP	05	22	22
		e			38
		e		23	08
		eS!			34
		e		25	46
		ePcP		28	41
		Compression from NE			
		PH 10 u 8 sec			
		PZ 6,5u 8 sec			
		SH 21 u 3 sec			
		SZ 10 u 3 sec			
		Distance 660 km			
		Depth 300 km			
	14	eP	09	37	36
		eS			44
		Distance 66 km			
	15	eP	02	38	38
		Local			
	15	eP	05	07	02
		Local			
	15	iP	10	57	32
		iS		58	12
		Distance 90 km			
	16	e	13	38	58
		e(R)		42	28
	17	e(S)	05	03	19
		e(Q)		06	00
		eR			38

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PROVISIONAL READINGS AT SANTIAGO (SANTA LUCIA)

Mar. 1 1960

eP 18 18 02
eS 47
Distance 410 km

1
eS 20 22 59
eSS 29 21
eSSS 32 51
eR 40 35
Distance 93°

2
eP 18 41 26
Local

3
e 11 40 42
eL 42 08
eR 43 50

3
eP 15 42 12
eS 43 48
e 44 19
Distance 940 km
Felt in Chiloé Island (III)
MZ 1,5 u 3 sec
MH 4 u 3 sec

4
eP' 04 12 53
epP' 13 30
eP2 14 22
ePP 18 00
ePS 27 44
eSS 39 32
e 52,7
e 57,3
e 05 07 --
Distance 170°
Depth 80 km

5
eP' 14 08 48
ePKS 12 36
e 14 40
ePS 22 30
eSS 30 40
eSSS 35 52
eG 48,5
eR 55 --
Distance 144°
GH 17 u 70 sec

6
eQ 03 21 51
eR 30,5

6
e 04 31 51

6
eP 06 06 13
eS 07 01
Distance 440 km

7
iP 05 32 47
Compression
Local

8
e 11 12 34

8
e(S) 12 10 58
e(SS) 15 28
e(G) 18 38
e(R) 20 02
Distance 65° ?

8
e(R) 13 07 58

8
iP 16 47 18
ipP 48 18
isP 43
iPP 51 37
epPP 52 34
esPP 58
eSKS 57 36
epSKS 58 16
eS 44
eSP 17 00 24
ePPS 02 06
eSS! 06 14
e 07 23
i(P'P') 10 58
eQ 13,5
e 16 34
eR 18,5
Distance 104°
Depth 250 km
PZ 1,8u 6 sec
PH 1 u 6 sec
PPZ 3,5u 8 sec
SKSH 18 u 16 sec
MH 13 u 40 sec
MZ 6 u 40 sec
Magnitude 6 3/4 - 7

8
i 17 03 05
iS 25
Local

9
eP 13 05 27
eS 57
Distance 260 km

9
iP 23 58 16
ipP 42
i 59 40
eS 00 01 20
Dilatation from NW
Distance 16,7°
PH 14 u 12 sec
PZ 13 u 12 sec
SH 90 u 12 sec
Felt:Arica III, Iquique II

10
eL 00 50,5

10
eP 00 52 30
eS 01 02 30
eSS 07 46
eSSS 10 58
eG 13,5
eR 16,8
Distance 82°

10
eP 10 13 24
eS 42
Distance 140 km

10
iP 13 57 36
eS 14 08 18
ePPS 10 10
eG 21 58
eR 26 10
Compression
Distance 91°

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PROVISIONAL READINGS AT SANTIAGO
(SANTA LUCIA)

Mar.10 1960
eP 14 52 08
eS 32
Dilatation
Distance 200 km

10 eP 15 23 08
eS 16
Dilatation
Distance 70 km

10 eP 17 08 39
eS 09 21
Distance 370 km

10 e(S) 19 12 10
e(SS) 16 30
e(G) 19 58
e(R) 22 58

11 eL 00 07 00

11 e 05 19 48
eL 27 00

12 eP 13 48 47
eS 49 25
e 55
Compression from S
Distance 340 km

12 eP 21 36 12
eS 34
Distance 180 km

12 ePP 20 51 19
ePS 21 01 23
eP'P' 06 59
eSS 08 13
eG 22 19
eR 28 --
Distance 125°

13 eP 14 44 31
eS 50
Distance 150 km

13 e(R) 21 06,4

13 e(R) 21 55 48

14 eP 00 01 20
eS 07 34
eG 10 52
eR 13 16
e(Lg) 15 20
Distance 42,5°

14 e 10 15 02
eR 21,3

15 e 20 17 48
eL 21 30

16 e 00 47 02
eQ 49 00
eR 52,2

16 e(P) 17 53 --
eSKS 18 03 00
eS 30
eSKS 04 38
eSS 09 38
eQ 16 00
eR 21 30
Distance 92°

MH 3,5 u 24 sec
MZ 4 u 24 sec

17 e 12 16 16
e 21 36
eR 25 16

17 ePPP 21 41 04
eSS 51 58
eSSS 55 30
eQ 58,8
eR 22 02,5
Distance 86°

17 eP 18 40 14
Compression
Local

18 eP 22 27 08
eS 28 16
eSSS 48
e 31 32
Distance 640 km
MH 9 u 10 sec
MZ 9 u 10 sec
Felt:Valdivia Prov.(III-IV)

19 eP 06 22 46
eS 23 10
Distance 200 km

19 e 19 38 32
e 20 12,5
eR 19,5

20 eP' 17 27 28
epP' 40
e 48
eP$_2$ 54
ePP 31 14
ePPP 34 34
ePcPPKP 35 48
eSKKS$_1$ 38 01
eSKKS$_2$ 28
e 40 44
ePS 42 32
ePPS 44 14
e! 46 14
eSS 50 48
ePSS 51 44
eSSS 56 36
eQ 18 09 20
eR 17 08
Dilatation from NW
Distance 151°
P'H 1,5 u 10 sec
P'Z 5 u 10 sec
PPZ 7 u 24 sec
MH 100 u 20 sec
MZ 60 u 20 sec
Magnitude 7 1/2

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PROVISIONAL READINGS AT SANTIAGO
(SANTA LUCIA)

Mar.21 1960

	eP'	00 54 50
	eSS	01 18 07
	eSSS	23 53
	eQ	38 00
	eR	44 29

Distance 154°
MZ 3 u 20 sec
MH 3,5 u 20 sec
Magnitude 6

21	eSS	10 03 00
	eQ	21 24
	eR	28 24
21	eS	19 54 59
	e	56 05
22	eR	02 15,7
22	eP	02 43 27
	e(pP)	56
	eS	53 53
	ePS	54 45
	eSS	58 43
	eSSS	03 03 11
	eQ	05,5
	eR	08,5

Distance 80°
Deeper than normal?

22	eQ	20 09 00
	eR	14,4
23	eP'$_1$	00 43 19
	eP'$_2$	45
	ePP	47 07
	eSKS	50 17
	eSKKS$_1$	53 55
	ePS	57 25
	ePPS	59 57
	e	01 02 11
	eSS	06 39
	eSSP	07 20
	eSSS	12 23
	eQ	26,5
	eR	33,5

Distance 152°
P'Z 1 u 8 sec
PPZ 5 u 12 sec
MZ 19 u 20 sec
MH 25 u 20 sec
Magnitude 6½ - 6¾

23	eP'$_1$	22 42 40
	eP'$_2$	43 23
	eSKKS$_1$	53 05
	e	23 01 30
	eSS	06 00
	eSSS	12 --
	eR	32 00

Distance 153°

26	eQ	15 50 48
	eR	16 03,5
27	eSKS	04 14 05
	ePS	16 47
	eSS	22 47
	eQ	33 07
	eR	39 27

Distance 110°
MH 3,5 u 26 sec
MZ 2 u 26 sec
Magnitude 5 3/4

27	eP	04 55 54
	eS	56 29

Distance 310 km

27	eP	09 12 27
	ePP	16 55
	ePPP	19 33
	eSKS	23 03
	eS	24 41
	ePS	26 15
	ePPS	27 31
	e	29 07
	e	31 03
	eSS	32 07
	eSSS	36 05
	e(P'P')	43
	eQ	42 47
	eR	48 47

Distance 110°
MH 8,5 u 28 sec
MZ 6 u 28 sec
Magnitude 6

27	eP	13 20 27
	eS	21 21

Distance 500 km

27	eP	16 22 58
	eS	51

Distance 500 km

27	ePP	20 28 09
	e(ScP)	30 25
	eS	34 25
	eQ	39 55
	eR	44 23

Distance 62°

27	eP	23 40 41
	eS or SKS	50 55
	ePPS	52 27
	eQ	ØØ 51 51
	eR	00 0[illegible] --

Distance 84°

28	eP	00 21 37
	eS	27 57
	eQ	31 27
	eR	33 --

Distance 43°
SH 6 u 12 sec
MH 11 u 20 sec
Magnitude 6-6¼

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PROVISIONAL READINGS AT SANTIAGO
(SANTA LUCIA)

Mar.28 1960
eP 02 06 34
eS 47
Distance 110 km
29 e(S) 06 35 11
eL 40 37
eR 42 37
29 eS 06 57 09
ePS 58 37
eSS 07 04 29
eSSS 08 01
e(P'P') 09 46
eQ 14 33
eR 19 55
Distance 107°
Deeper than normal?
SH 4,5 u 12 sec
MH 19 u 20 sec
MZ 19 u 20 sec
Magnitude 6½-6 3/4
29 e 22 48 29
eQ 23 04 01
eR 10 01
30 ePS 11 18 11
eSS 24 37
eQ 35 43
eR 40 45
Distance 113°
MH 5 u 28 sec
MZ 4 u 28 sec
30 eS 15 44 11
ePS 45 57
ePPS 46 37
e 47 47
eSS 51 25
eQ 16 00 01
eR 04 37
Distance 102°
31 e(P) 04 21 06
eQ 24 48
eR 25 40
Apr. 1 e(P) 13 23 00
eS 26 14
1 eP 23 00 06
eS 00 30
Distance 200 km
5 eP 12 43 51
ePP or PcP 45 36
e 47 26
e 48 52
eS 50 08
eQ 52 52
eR 55 48
Dilatation
Distance 41,5°
MH 4 u 20 sec
MZ 4 u 20 sec
Magnitude 5

6 eP 02 08 24
e 09 08
eS 11 04
e 12 24
Distance 13°
Felt: Tarapacá and
Antofagasta Prov.(III-V)
6 iP 21 10 00
iS 46
Distance 320 km
8 eP 00 08 40
e 09 28
eSKS 18 52
ePS 20 24
eSS 25 32
eSSS 28 48
eQ 31 24
Distance 90°

10 iP 08 53 08
iS 42
Dilatation
Distance 300 km
MH 8 u 1⅓ sec
12 eP 20 05 34
iS 48
Distance 120 km
13 iP 00 14 08
eS 15 02
Dilatation
Distance 120 km
13 iP 12 46 57
eS 54 23
eQ 58 11
eR 13 02 35
Compression
Distance 53°
13 iP 18 56 45
iS 57 02
Dilatation from W
Distance 140 km
15 eP 03 32 53
ePP 34 21
eS 38 45
eQ 41 31
eR 42 51
Distance 37,5°
SH 8 u 10 sec
MZ 10 u 8 sec
MH 35 u 8 sec
20 iP 15 30 35
iS 32 30
Dilatation
Distance 16°
21 eS 02 32 00
eQ 36 34
eR 39 16

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PROVISIONAL READINGS AT SANTIAGO
(SANTA LUCIA)

1960

May	2	e	08	52	08	
		e		56	00	
		eS	09	01	36	
		e		07	14	
		e		12	30	
		eR		16	40	
	4	i	12	29	52	
		Local				
	4	iP	18	57	29	
		eS			41	
		Dilatation				
		Distance 90 km				
	4	e	19	01	47	
		eQ		11	07	
		eR		15	31	
	5	eP	00	23	29	
		eS		24	50	
		Distance 760 km				
	8	eR	02	43	06	
	9	ePP	20	23	06	
		eS		27	06	
		eQ		30	26	
		eR		32	46	
		Distance 43°½				
		Mz 5 u 20 sec				
		MH 6 u 20 sec				
	10	eP	09	34	56	
		eS		36	40	
		Distance 8°½				
	10	eL	11	09	--	
	11	iP	11	55	02	
		eS			12	
		Distance 80 km				
	11	e	16	45	50	
		eQ	17	01	56	
		eR		05	00	
	11	eP	18	24	47	
		eS		25	21	
		Distance 290 km				
May	11	eSKSP	18	59	36	
		eSSS	19	11	56	
		e		16	36	
		eQ		22	20	
		e		29	50	
		eR		32	40	
		Distance 142°				
	11	eP	20	25	55	
		eS		26	17	
		Distance 180 km				
	12	eP	22	40	27	
		ePP		42	07	
		ePcP			25	
		ePPP			43	
		eS		46	43	
		eQ		50	07	
		eR		52	57	
		Distance 42°				
		Pz 3 u 6 sec				
		PH 3 u 6 sec				
		SH 12 u 12 sec				
		MH 12 u 20 sec				
		Magnitude 6				
	13	ePS	16	36	52	
		eSS		43	22	
		eSSS		47	38	
		eQ		56	02	
		eR	17	02	02	
		Distance 120°				
		MH 4 u 20 sec				
		Mz 4 u 20 sec				
	13	eSKS	21	10	00	
		ePPS		11	40	
		eSS		15	48	
		eSSS		19	48	
		eR		26	30	
		Distance 87°				
	13	iP	21	38	58	
		iS		39	12	
		Distance 120 km				

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PROVISIONAL READINGS AT SANTIAGO
(SANTA LUCIA)

May	14	eP	10	55	35	May	23	eP	00 27 55
		eS			45		23	eP	00 53 09
		Distance 80 km					23	e(P)	14 07
	15	eR	06	43	00		23	e(P)	15 49 50
							23	e(P)	17 06 10
	19	e	10	06	52		23	eP	18 57 12
		e		09	40		23	eP	19 27 50
		Disturbed by Following					24	e(P)	01 38 00
								eS	39 00
	19	e	10	40	22			Distance 560 km	
		eSKSP		41	10			Mz 2.5 u	
		eSS		47	38			Magnitude 4.7	
		e		55	06		24	eP	03 25 04
		eQ		59	46			eS	26 28
		e(R)	11	05.	24			Distance 790 km	
		Distance 118°						Mz 7 u	
		Interpretation doubtfull. Disturbed by preceding						Magnitude 5.5	
		Mz 12 u 20 sec					24	eP	03 49 40
		MH 22 u 20 sec						eS	50 36
		Magnitude 6½						Distance 520 km	
	21	iP	10	04	06			Mz 3.5 u	
		e(S)		05	06			Magnitude 4.7	
		Compression from SW					24	eP	04 02 40
		Distance 540 km						eS	03 40
		Magnitude 7½						Distance 560 km	
	21	e(P)	10	32	12			Mz 3.5 u	
	21	e(P)	10	55	39			Magnitude 4.8	
	21	e(P)	12	22	40		24	eP	07 59 00
	21	e(P)	13	01	30			eS	08 00 00
	21	e(P)	13	50	06			Distance 560 km	
	21	e(P)	14	00	47			Mz 8 u	
	21	e(P)	14	07	11			Magnitude 4.9	
	21	e(P)	14	34	00		24	eP	09 09 20
	21	e(P)	15	09	50			eS	10 20
	21	e(P)	16	38	26			Distance 560 km	
	21	e(P)	18	28				Mz 3 u	
	21	e(P)	19	09				Magnitude 4.8	
	22	e(P)	06	03	10		24	eP	15 05 24
	22	e(P)	07	47	50			eS	06 32
	22	e(P)	08	12	30			Distance 620 km	
	22	e(P)	09	55	29			Mz 2.5 u	
	22	e(P)	10	33	07			Magnitude 4.7	
	22	~~e(P) 10 35~~							
	22	e(P)	12	18	47				
	22	e(P)	18	57	50				
	22	i P	19	12	(36)				
		Compression from SW							
		Magnitude 8 ¾							

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1960 ?

PROVISIONAL READINGS AT SANTIAGO
(SANTA LUCIA)

May 24 eP 15 21 00
eS 22 00
Mz 3.5 u
Magnitude 4.7
Distance 560

24 eP 15 25 00
eS 26 00
Distance 560 km
Mz 23 u
Magnitude 5.1

24 eP 20 36 32
eS 40 04
iSSS 41 00
Distance 2.200 km
Mz 16 u
M 5.5

24 e(P) 22 41 52
eS 43 06
Distance 660 km
Mz 5 u
Magnitude 4.8

24 eP 23 26 00
eS 27 10
Distance 640 km
Mz 5 u
Magnitude 5.0

25 eP 02 51 51
eS 52 55
Distance 560 km
Mz 27 u
Magnitude 5.4

25 eP 03 19 43
eS 21 23
Distance 760 km
Mz 10 u
Magnitude 5.4

25 eP 04 50 22
eS 51 54
Distance 860 km
Mz 23 u
Magnitude 5.7

25 iP 08 37 32
eS 39 36
eR 40 28
Distance 1.300 km
Mz 150 u
Magnitude 6.9

May 25 eP 12 49 40
eS 50 48
Distance 660 km
Mz 6 u
Magnitude 4.8

25 eP 18 04 42
eS 05 44
Distance 550 km
Mz 14 u
Magnitude 5.0

25 eP 19 23 41
eS 25 43
Distance 840 km.
Mz 5 u
Magnitude 4.4

25 eP 21 05 53
eS 06 54
Distance 540 km
Mz 11 u
Magnitude 4.9

26 eP 01 31 01
e 42
e 32 38
Mz 9 u

26 ePS 05 40 54
e(SSS) 52 26
eQ 57 40
eR 06 04 50

26 iP 07 45 33
iPPP 49
eS 46 43
Distance 640 km
Mz 22 u
Magnitude 5 3/4

26 eP 10 00 26
eS 01 44
Distance 720 km

26 eP 11 57 10
eS 58 40
e 59 02
e(R) 20
Distance 840 km
Mz 9 u
Magnitude 5.5

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PROVISIONAL READINGS AT SANTIAGO
(SANTA LUCIA)

May 26 eP 15 08 32
e(S) 10 14
e 48
e 11 30
Distance 950 km
Mz 9 u
Magnitude 5.7

26 eP 18 06 00
eS 07 20
Distance 750 km.

26 iP 19 35 00
eS 36 00
Distance 560 km
Mz 23 u
Magnitude 5.5

26 iP 20 00 12
eS 01 26
e(R) 41
Distance 690 km
Mz 28 u
Magnitude 6.4

26 iP 23 00 21
e 34
eS 01 28
e 44
Distance 780 km
Mz 10 u
Magnitude 5,3

27 eP 01 29 32
eS 31 36
Distance 1.200 km
Mz 7 u
Magnitude 5.4

27 eP 03 49 23
eP 09 22 42
eS 24 08
Distance 820 km
Magnitude 4½

27 e(P) 10 26 32
eS 27 39
eR 57
Distance 620 km
Magnitude 5.0

27 eP 11 28 02
e 17
eS 29 18
Distance 720 km
Mz 43 u
Magnitude 5½

May 28 eP 03 06 26
eS 07 40
e 08 12
e 09 02
Distance 680 km
Mz 35 u
Magnitude 5 ½

28 eP 11 06 51
eS 07 49
e 08 03
Dilatation from SW
Distance 540 km
Mz 100 u
Magnitude 5 ½ - 6

29 eP 01 53 12
eS 54 34
Distance 670 km
Mz 5 u
Magnitude 4 ½

29 eP 03 35 12
eS 36 40
Distance 820 km
Mz 4 u
Magnitude 4 ¾ - 5

29 eP 05 13 41
eS 14 35
Distance 500 km

29 eP 05 29 41
eS 30 45
Distance 590 km
Mz 3 u
Magnitude 4 ¼

29 iP 07 40 36
eS 42 02
Compression from SW
Distance 820 km
Mz 40 u
Magnitude 6

29 iP 08 35 29
eS 36 43
Distance 690 km
Mz 40 u
Magnitude 5 ½ - 6

29 eP 10 21 46
e(S) 22 32
Distance 460 km
Mz 6,5 u
Magnitude 4½ - 5

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PROVISIONAL READINGS AT SANTIAGO
(SANTA LUCIA)

May 29 eP 10 54 30
eS 55 32
Distance 570 km
Mz 4 u
Magnitude 4 ½ - 5

29 eP 13 37 24
eS 38 58
Distance 690 km
Mz 19 u
Magnitude 5 ½

29 eP 14 06 18
eS 07 24
Distance 620 km
Mz 27 u
Magnitude 5 ½

29 eP 21 26 23
eS 28 28
e 29 10
Distance 1.200 km
Mz 36 u
Magnitude 5 ½

29 eP 21 40 50
eS 41 56
Distance 620 km
Mz 16 u
Magnitude 5¼ - 5½

30 eP 02 22 34
eS 23 48
e 24 01
Distance 780 km
Mz 12 u
Magnitude 5 ¼

30 eP 07 02 14
e(S) 03 44
Distance 860 km
Mz 7 u
Magnitude 5 1/3

30 eP 17 47 52
eS 49 16
e 36
Distance 750 km
Mz 7.5 u
Magnitude 5 1/3

30 eP 21 22 48
eS 24 12
e 31

May Mz 4 u
Distance 800 km
Magnitude 4½ - 4 ¾

31 eP 02 41 51
i 56
iS 43 15
i 43
e(R) 49
Dilatation from SW
Distance 800 km
Mz 55 u
Magnitude 5½ - 6

31 iP 04 34 36
i 52
eS 35 52
e(R) 36 04
Distance 730 km
Mz 23 u
Magnitude 5½

31 eP 11 11 25
epP 38
ePP 13 10
eS 18 40
ePS 19 04
eQ 23 06
eR 26 26
Compression from N
Distance 50° ½
Mz 9 u 20 sec
MH 15 u 20 sec
Magnitude 5¾

31 iP 16 20 46
e 23 42
e 58
e(R) 24 12

31 eP 19 02 44
eS 03 59
e 04 36
Distance 660 km
Mz 10 u
Magnitude 5

31 eP 20 06 05
e(S) 07 41
e 08 14
e(R) 09 05
Distance 920 km
Mz 6,5 u
Magnitude 5 ¾

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PROVISIONAL READINGS AT SANTIAGO

SANTA LUCIA

June 1 eP 04 08 45
eS 09 09
Local

1 eP 05 04 07
eS 05 18
Distance 670 km
Mz 15 u
Magnitude 5

1 eP 06 40 54
eS 41 16
Distance 170 km

1 eP 07 06 31
eS 07 39
Mz 21 u
Distance 660 km
Magnitude 5-5 ¼

1 eP 08 52 25
eS 53 39
Distance 720 km
Mz 1.5 u
Magnitude 4 1/3

1 eP 11 04 26
e(S) 06 28
Distance 1.200 km
Mz 3.5 u
Magnitude 4½-5

1 eP 12 25 04
eS 26 04
Distance 560 km
Mz 3 u
Magnitude 4 1/3

1 eP 13 00 25
eS 01 17
Distance 480 km
Mz 3.5 u
Magnitude 4¼

1 eP 13 59 05
eS 14 00 05
Distance 560 km
Mz 12.5
Magnitude 4 1/3

1 eP 14 10 42
eS 11 58
Distance 820 km
Mz 4 u
Magnitude 4¾

June 1 eP 20 36 47
37 35
Distance 440 km
Mz 3.5 u
Magnitude 4

1 eP 21 16 08
eS 17 36
Distance 830 km
Mz 13 u
Magnitude 5¼

1 eP 22 33 36
eS 34 42
Distance 830 km
Mz 2 u
Magnitude 4½ - 4¾

1 eP 23 35 56
eS 37 32
Distance 920 km
Mz 11 u
Magnitude 5 ¼

2 eP 06 01 03
e(S) 03 53
Distance 16° ?
Magnitude 6-6¼

2 eP 08 37 51
eS 39 25
e (R) 40 17
Distance 880 km
Mz 17 u
Magnitude 5½

2 eP 21 32 24
eS 33 40
Distance 720 km
Mz 27 u
Magnitude 5 ½

3 eP 18 19 52
eS 21 50
Distance 11°
Mz 15 u
Magnitude 5½

3 eP 19 57 42
eS 59 30
e 42
e(R) 20 00 30
Distance 1.000 km
Mz 7.5 u
Magnitude 5½

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PROVISIONAL READINGS AT SANTIAGO

(SANTA LUCIA)

June 3
eP 21 50 48
eS 52 42
e 53 04
e(R) 44
Distance 1.000 km
Mz 7 u
Magnitude 5½

4
eP 03 04 08
i 23
eS 05 21
e 39
D
Distance 690 km
Mz 50 u
Magnitude 5 ½

4
eP 06 42 46
eS 44 12
Distance 780 km

4
eP 11 36 00
e 38 22

5
eP 13 17 43
eS 19 15
Distance 870 km
Mz 6 u
Magnitude 5

6
iP 05 58 39
e 06 01 44
Dilatation from SW
Mz 100 u
MH 100 u

6
e(P) 17 18 22
eS 21 46
e(R) 22 22
Distance 13°
Mz 12.5 u
Magnitude 5½

7
eP 02 19 26
eS 21 06
Distance 990 km

June 7
eP 05 24 25
eS 26 13
e 25
eR 27 20
Distance 1.100 km
Mz 40 u
Magnitude 6

7
eP 12 57 42
eS 59 22
e(R) 38
Distance 940 km

7
eP 14 04 46
eS 07 10
Distance 790 km

7
eP 18 40 00
eS 41 36
Distance 920 km

8
eP 06 03 14
eS 04 25
Distance 660 km

8
eP 07 03 14
eS 04 24
Distance 660 km

8
eP 07 13 34
e(S) 15 00
Distance 820 km

9
eP 08 45 09
eS 46 40
Distance 870 km

9
eP 10 06 39
eS 07 32
e 40
e(R) 56
Distance 520 km
Mz 5 u
Magnitude 4 ½

10
eP 14 30 51
eS 32 03
Compression
Distance 670 km
Mz 22 u
Magnitude 5 ½

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PROVISIONAL READINGS (SANTA LUCIA)

June 1960

13	eP	00	33	50
	eS		35	38
	e(R)		36	50
	Distance 10°			
	MZ	13 u	10 sec	
	MH	14 u	10 sec	
	Magnitude= 5 ½			
13	eP	02	02	02
	e(PPP)			14
	iS			58
	Distance 530 km.			
	MZ	7 u	10 sec	
	MH	8 u	10 sec	
	Magnitude= 4 ¾ - 5,1/3			
13	e	04	33	18
13	iP	05	50	00
	eS		52	02
	eR		53	16
	Compression from SW			
	Distance 12°			
	MZ	18 u	10 sec	
	MH	21 u	10 sec	
	Magnitude 5 ½ - 6			
13	eP	11	56	14
	e(S)		58	40
13	e	12	39	02
13	eP	13	45	20
	e			42
	e(S)		46	46
13	e	20	33	24
	e		34	26
13	e	21	13	12
13	e	22	16	48
13	eP	23	05	14
	e(S)		06	48
	e(R)		07	30
13	e(P)	23	34	44
	e(S)		37	30

June 1960

14	eP	02	56	26
	e			38
	eS		58	33
	e		59	02
	Distance 11°			
	MZ	9u	10 sec	
	MH	12u	8 sec	
	Magnitude= 5 ½			
14	e	07	44	18
14	iP	11	46	16
	iS			46
	Compression			
	Distance 260 km			
14	e	13	24	02
14	e	17	22	26
15	eP	02	29	48
15	e(P)	08	07	10
15	e(P)	09	45	42
	e(S)		47	18
15	eP	11	20	18
	e(PPP)			48
	eS		22	38
	e		23	12
	e			52
	e		24	00
	Distance 13°			
	MZ	15 u	10 sec	
	MH	15 u	10 sec	
	Magnitude = 5½ - 5¾			
15	iP	15	13	50
15	e(P)	23	44	02
	eS		54	30
	e	00	00	26
	eR		10	42
16	eP	04	04	01
	e(PPP)			15
	eS		15	15
	e(R)			39
	Distance 690 km.			

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June 1960

16 eP 04 35 53
e 36 15
e(S) 19

16 eP 06 42 01
e(S) 43
e 53
e 43 35

16 eP 07 16 11

16 eP 07 46 27

16 eP 08 48 19
e(S) 49 47

17 e(P) 00 22 23

17 e(P') 16 54 (55)
e 17 03 21
eSS 13 23
eQ 27 03
eR 33 33
Distance 120° ?

18 eP 13 42 03
e(S) 43 03

18 eP 14 17 15
eS 18 31
e 40
Distance 690 km

19 eP 01 20 03

19 eP 02 41 59

19 eP 10 19 32

19 e(P) 10 21 25

19 eP 21 43 45
eS 44 42
Distance 530 km.

20 iP! 02 02 30
eS 03 34
Compression from SW
Distance 600 km
MZ 100 u
MH 100 u

20 eP 04 54 36

20 eP 07 16 34

June 1960

20 eP 09 19 42

20 eP 10 42 07
eS 27
Distance 170 km

20 eP 11 54 34
eS 50
Distance 150 km.

20 13
not recorded. Change of paper

20 eP 13 25
Disturbed by preceding

20 iP 17 00 58
eS 02 10
Compression
Distance 670 km
MZ 40 u 8 sec
MH 40 u 10 sec
Magnitude 5½

21 eP 07 34 17
i 32
eS 35 28
e(R) 36 06
Distance 670 km.

21 eS 08 49 09
eQ 52 25
eR 54 29
Distance 43°
MH 6 u 20 sec.
MZ 4 u 20 sec.

21 iP 21 21 41
ePP 43 18
eS 47 57
eQ 51 01
Distance 40 ½ °
MH 10 u 20 sec
MZ 3 u 20 sec

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June 1960				
22	eP	06	41	42
	i		42	00
	i			06
	e			48
	eS		43	08
	Distance 810 km			
	MZ 17 u 8 sec			
	MH 35 u 6 sec			
	Magnitude $5\frac{1}{2}$ - $5\frac{3}{4}$			
22	iP	09	58	17
	i			23
	e			34
	i		59	02
	e(S)			22
	e(R)			44
	Distance about 600 km			
	Compression from S			
	MZ 35 u 10 sec			
	MH 52 u 10 sec			
	Magnitude ($5\frac{1}{2}$)			
22	iP	20	14	37
	i		15	30
	eS			52
	Distance 710 km			
22	eP	21	48	11
	eS		49	25
	Distance 700 km			
	MZ 12 u 12 sec			
	MH 15 u 12 sec			
	Magnitude 5 - $5\frac{1}{4}$			
24	e	07	28	18
	e		30	00
24	eP	07	52	07
24	eP	10	55	30
	e(S)		56	36
24	eP	12	46	13
	e(S)		47	28
24	iP	14	02	09
	e(S)			58
	Dilatation			

June 1960				
25	eS	02	25	48
	eSS		31	38
	eQ		38	15
	eR		42	20
	Distance 87°			
25	eP	14	54	38
	eS	15	04	56
	eSS		10	58
	eR		21	20
	Distance 87°			
	MZ 3 u 16 sec			
	MH 5 u 16 sec			
25	eP	17	28	27
25	iP	19	36	50
	e		37	18
	e(S)			32
	e			46
	Compression from S			
26	eP	06	22	00
27	No time marks.			
28	eP	13	38	17
	eS		44	43
	eR		50	33
	Distance $43\frac{1}{2}$°			
29	eP	01	18	21
	eS		19	21
	Distance 560 km			
	MZ 10 u 10 sec			
	MH 15 u 10 sec			
	Magnitude 5			
29	eP	01	59	41
	eS	02	01	45
	Distance 11°			
	MZ 26 u 10 sec			
	MH 70 u 10 sec			
	Magnitude $5\frac{3}{4}$ - 6			

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June
1960

29
eP 04 42 00
e 44 36
eSKS 52 18
eS 36
eSKSP 53 28
eSS 58 12
eQ 05 05 10
eR 08 56
Distance 87°
MZ 3 u 28 sec
MH 4 u 28 sec

30
eP 11 47 21
e 48 39
eS 59
e 49 19
e 35
Distance 1000 km
MZ 10 u 10 seg
MH 24 u 10 sec
Magnitude 5½ - 6

JULY
1960
1°
eP 08 19 59
eS 21 07
Distance 620 km
MZ 5 u 4 sec
MH 6 u 4 sec

1°
eP 13 36 24
eS 37 52
Distance 820 km
MZ 3 u 4 sec
MH 7 u 4 sec

1°
eP 23 02 11

2°
eP 09 01 09
eS 03 59
Compression
Distance 14½°
MZ 10 u 12 sec
MH 12 u 12 sec
Magnitude 5½ - 5¾

July
1960
2
eP 10 18 43
eS 20 11
e(SSS) 39
Distance 820 km
MZ 9 u 12 sec
MH 12 u 12 sec
Magnitude 5, 1/3

2
eP 12 02 55
epP 03 15
esP 25
ePP 04 15
ePcP 05 03
eS 08 31
esS 08 59
eQ 11 19
eR 12 59
Distance 37½°
Repth about 100 km
MZ 5 u 20 sec
MH 10 u 20 sec

3
eP 02 21 (30)
eS 22 54

3
eP 02 31 (48)
eS 33 31

3
eP' 20 39 43
ePP 41 44
ePS 51 56
ePPS 53 20
eSS 58 52
e 21 01 32
eQ 13 00
eR 18 32
Distance 138°
MZ 6 u 20 sec
MH 8 u 20 sec
Magnitude 6¼

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July
1960

4
ePP 04 42 20
ePPP 46 28
eSKS 48 52
ePS! 53 01
ePSP 55 28
eSS 56 26
eSSS 05 01 10
eQ 05 32
eR 11 08
16 30
Distance 102°
MZ 9 u 20 sec
MH 16 u 20 sec
Magnitude 6 1/4

4
ePS 13 37 00
eSS 42 49
eSSS 46 --
eQ 50 30
eR 56
Distance 101°
MZ 1 u 20 sec
MH 2 u 20 sec

4
eP 21 31 48
eS 34 00
eSS 20
eSSS 30
eR 52
Distance 12,7 °

5
iP 05 46 50
iS 47 56
e 48 13
Compression from SW
Distance 610 km
MZ 40 u
MH 65 u
Magnitude 6

5
eP 08 07 53
eS 09 13
e 20
e 32
Dilatation
Distance 760 km
MZ 12 u 10 sec
MH 20 u 8 sec
Magnitude 5 1/4

July
1960

6
eP 01 21 20
eS 22 37
Distance 720 km

6
e 07 30 05
e(SS) 34 53
e 37 50
eQ 41 45
eR 45 09

7
e 15 51 25
e 59
e 52 00

7
iP 17 39 04
e(PP) 15
e(PPP) 21
e 49
eS 40 11
e(SSS) 49
Distance 630 km
MZ 7 u
MH 27 u
Magnitude 5 - 5, 1/3

7
iP 21 42 23
e 33
e 57
eS 43 31
Distance 630 km
MZ 20 u
MH 37 u
Magnitude 5 1/2 - 5 3/4

8
eP 16 08 00

8
eP 18 37 42

8
iP 19 22 40
e 23 02
eS 24 02
e 18
Distance 770 km

8
eP 20 20 18
e 22 34
e 24 04

8
eP 20 30 (56)

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(SANTA LUCIA)

July 1960

9	eP	06	07	21
	e(S)		09	02
	e			22
9	e	18	01	--
	e		03	14
10	iP'	00	25	06
	ePKS		28	33
	eSKKS		35	05
	eSKSP		38	21
	eSS		47	09
	eSSS		52	25
	eQ		05	
	eR		12	

Dilatation
Distance 145°
MH 10 u 20 sec
MZ 7 u 20 sec
Magnitude 6¼ - 6½

10	e	00	15	00

local

10	e	20	20	51

local

11	iP	06	59	51
	e(PPP)	07	00	06
	eS!		01	03
	e			21

Dilatation
Distance 670 km
MZ 20 u 12 sec
MH 30 u 12 sec
Magnitude 5, 1/3 - 5½

11	iP	08	07	54
	e		08	12
	eS			53
	e		09	50

Compression
Distance 560 km
MZ 30 u 8 sec
MH 30 u 8 sec
Magnitude 5¼ - 5½

11	eP	10	29	28
	e(PPP)			45
	eS		30	42

Distance 690 km

July 1960

11	iP!	12	08	15
	eS		19	--
	eSS		25	01
	eSSS		28	57
	eQ		31	52
	eR		37	01

Dilatation
Distance 91°

12	eL	12	00	00
12	e	19	20	40

local

13	eP	08	05	35
	iS		13	00
	e(ScS)		14	42
	eSS		16	36
	eSSS		18	56
	eR		20	46

Distance 55°
Deeper than normal ?
SH 12 u 16 sec
MZ 16 u 20 sec
MH 20 u 20 sec
Magnitude 6

13	eP	12	02	14
	e(S)		03	34
15	eP	18	55	12
15	eP	22	04	02

1960

18 iP 09 56 55
i 57 06
iS 12
Dilatation
Distance 130 km.
eP 13 43 39
eS 44 51
Distance 670 km

19 eR 03 00 00

19 eR 04 32 40

19 iP 11 14 37
Compression
Local

20 eP 16 22 40
e(S) 24 00

20 eP 21 39 43
i(PPP) 59
i 40 06
eS 58
Compression from SW
Distance 710 km
MH 70 u
MZ 70 u
Magnitude 6

21 iP 04 02 43
i 51
eS 04 01
eR 37
Distance 730 km
MZ 20 u 10 sec
MH 25 u 11 sec
Magnitude 5, 1/3 -5,2/3

21 iP 07 57 10
e 36
local

21 eP 08 04 20
e 06 45
Local

22 iP 11 12 10
iS 20
Distance 80 km

24 eP 10 22 44
eS 34 12
Distance 860 km

July
1960

24 eP 10 39 03
eS 40 28
Distance 860 km
MZ 40 u 12 sec
MH 50 u 12 sec
Magnitude 5¾ - 6

25 e 04 21 32
e(R) 28 00

25 ePKS 11 34 40
ePS 44 14
eSS 52 12
eQ 08 00
eR 16 22
Distance 138 °
MZ 8 u 36 sec
MH 20 u 36 sec

27 iP 10 07 41
eS 09 57
eR 11 13
Compression
Distance 12°
MZ 42 u 7 sec
MH 60 u 7 sec
Magnitude 6 - 6 ¼

29 e 00 51 12
e 01 06 44
e 12 08

29 e(P'$_2$) 17 51 22
ePP 54 56
ePKS 55 28
eSKKS$_1$ 18 01 52
eSS 14 46
eSSS 20 00
eQ 33 15
eR 41 38
Distance 148°
MZ 23 u 20 sec
MH 45 u 20 sec
Magnitude 6¾ - 7

30 eL 02 19 56

July 1960

31	eP	03	14	51
	e(PKS)		18	36
	ePPP		20	06
	eSKKS		23	56
	e		25	28
	eSKSP		27	20
	e(PS)		28	28
	eSS		32	40
	eSSP		33	30
	eSSS		37	56
	eQ		47	30
	eR		54	00

Distance 132°
MZ 9 u 20 sec
MH 15 u 20 sec
Magnitude 6¼ - 6½

31	eP	14	57	31
	eS		59	46
	eR	15	00	48

Distance 11½°
MZ 30 u 10 sec
MH 45 u 10 sec
Magnitude 6

August 1960

1	eP	00	58	08
	e			32
	eS			42

Distance 290 km

1	eP	17	29	12
	eS		30	42

Distance 870 km

1	eR	18	30	28
1	eP	20	13	46
	eS		15	00

Distance 700 km
MZ 18 u 12 sec
MH 27 u 7 sec
Magnitude 5 1/3 - 5 ½

2	e	05	20	51
	e		25	23
	eSKS		31	17
	eS		32	11
	ePS		34	11
	eSS		38	59
	eQ		48	59
	eR		53	00

Distance 101°
MZ 2 u 28 sec
MH 5 u 26 sec

August 1960

2	e(P)	09	43	(44)
	eSKS		53	35
	eS			59
	eSS		59	35
	eQ		06	29
	eR		10	24

Distance 87°
MH 2 u 28 sec

2	eS	13	56	45
	eR	14	02	07

MZ 3,5 u 20 sec
MH 4 u 20 sec

3	eP	01	15	23
	eS		16	59

Distance 940 km
MZ 8 u 12 sec
MH 10 u 8 sec
Magnitude 5 1/3

3	eP	19	09	35
	eS		11	13

Distance 950 km
MZ 5 u 16 sec
MH 5 u 8 sec
Magnitude 5

4	iP	06	09	15
	eS			26

Dilatation from E
Distance 90 km

4	eP"	07	53	56
	e		55	28
	ePP!		56	00
	e			36
	ePKS!		57	10
	eSKS	08	00	58
	e		02	50
	ePS		05	52
	eSS		13	00
	e		15	50
	eQ		27	00
	eR		33	52

Distance 129 °
Deeper than normal?
MZ 4 u 20 sec
MH 10 u 24 sec
Magnitude 6 - 6¼

4	eP	10	56	28

August
1960

4 eP 11 17 22
eS 18 52
Distance 860 km

6 iP 08 53 26
iS 35
Compression
Distance 80 km

6 eP 14 52 05
e 39
eS 54 23
Distance 13°
MZ 11 u 10 sec
MH 13 u 10 sec
Magnitude 5 2/3

7 eS 16 20 04
Local

9 iP 04 08 47
eS 09 41
Compression
Distance 530 km

9 eSKS 08 02 45
e(PS) 04 09
eSS 08 49
eQ 17 30
eR 21 45
Distance 90°
MZ 5 u 24 sec
MH 8 u 24 sec

9 e 17 09 54
eQ 22 54 22
eR 27 --
MZ 4 u 24 sec
MH 7 u 22 sec

12 eL 10 43 00

13 eR 06 39 16

13 eL 08 21 00

13 iP! 14 16 39 24
iS 18 01
e(R) 36
Compression from SW
Distance 770 km
PZ 12 u 12 sec

13 PH 17 u 12 sec
MZ 100 u 12 sec
MH 100 u 12 sec
Magnitude 6 ½ - 7

15 e 07 35 14
eL 45 02

17 e 09 50 30
e(R) 58 50

17 eSorSS 11 41 00
eQ 48 00
eR 51 50

18 iP 11 08 30
eS 38
e 09 48
eR 10 08
Dilatation
Distance 640 km

19 iP 11 47 21
iS 32
Distance 90 km

20 iP 20 16 52
eS! 23 20
eQorSS 26 35
Compression
Distance 42½°
MZ 20 u 20 sec
MH 80 u 20 sec
Magnitude 6 - 6½

no seismograms

eP 14 17 39
eS 25 15
eR 33 13
Dilatation
Distance 55°
MZ 3 u 20 sec
MH 4 u 20 sec

eP 06 02 00
eSKS 12 34
eS 52
ePS 14 00
eSS 18 36
eR 30 00
Distance 88°
MH 2 u 20 sec

August
1960

25	No time marks			
26	No time marks			
27	e(Q)	22	12	10
	eR		13	20
28	iP	02	50	37
	Compression			
28	eS	06	18	36
	eQ		21	36
	eR		23	40
	Distance 41°			
28	eR	19	19	--
28	eP	21	58	37
	eS		59	56
	eR	22	00	40
	Distance 740 km			
29	eP	05	00	(25)
	eS		06	20
	eQ		08,5	
	eR		10	40
	Distance 39°			
29	e(P)	14	56	28
	eS			46
30	eP	06	52	(52)
	e(PPP)		54	50
	eS		59	00
	eQ	07	02	00
	eR		03,	6
	Distance 41°			
	MZ 7 u 20 sec			
	MH 16 u 20 sec			
	Magnitude $5\frac{1}{4}$ - $5\frac{3}{4}$			
31	eP	07	23	(46)
	eS		30	00
	eQ		33	00
	eR		34	44
	Distance 41°			
	MZ 5 u 20 sec			
	MH 9 u 20 sec			
31	iP	11	28	42
	e		30	04

September
1960

1	e	07	57	44
	e	08	03	56
	eR		14	40
1	eSKS	09	53	04
	eS		54	28
	eSKSP		56	00
	eSS	10	01	52
	eR		17	00
	Distance 107°			
	Interpretation Doubtful			
1	e	16	12	40
	e		16	28
	e		23	40
	eR		31,5	
1	e	20	33	24
	e		39	56
	eR		46,2	
2	iP	07	38	46
	eS		39	58
	e(R)		40	40
	Distance 670 km			
2	iP	18	33	06
	iS			31
	Dilatation			
	Distance 210 km			
2	e(SS)	22	40	10
	e(Q)		53	56
	eR		59	20
4	eQ	00	46	30
	eR		54	20
7	iP	01	25	51
	eS		32	28
	eQ		35	44
	eR		38	30
	Dilatation			
	Distance 45°			
	MH 6,5 u 20 sec			
	MZ 5 u 20 sec			

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PROVISIONAL READINGS AT SANTIAGO
(SANTA LUCIA)

Sept.10 1960	iP	02	45	55
10	iP	11	03	34
	e(S)		05	40
10	eP	13	28	31
10	eP	14	04	54
10	eP	21	46	43
10	eP	23	05	21
	e(S)		06	50
	e(R)		07	24
12	iP	03	58	57
	iS		59	24
	Compression			
	Distance 230 km.			
12	iP	06	10	55
	iS		11	13
	Dilatation			
	Distance 150 km.			
12	iP	13	59	48
	iS	14	00	15
	Compression			
	Distance 230 km.			
13	eP	00	44	(25)
	eS		45	(25)
14	iP	05	03	15
	iS		08	16
	eQ		09	24
	Dilatation			
	Distance 29,5°			
	MH 12 u 12 sec			
14	e(PS)	23	42	06
	e(SS)		48	20
	eQ		59	16
	eR	24	04	10
	Distance 113° ?			
17	eP	01	55	(37)
	eS		56	56

Sept.17 1960	eP'	08	25	03
	e(SKS)		28	06
	ePRS			40
	e(SKP)		40	16
	e(PPS)			48
	eSS		46	20
	eSSS		51	00
	eQ	09	04	06
	eR		11	00
	Distance 143°			
17	eP	19	12	48
	eS		14	00
	Distance 670 km.			
17	eP	20	09	10
	ePP		12	40
	eSKS		19	36
	e			44
	eSS		25	40
	eQ		30	46
	eR		36	42
	Distance 89°			
19	eP	19	09	19
	iS		15	17
	eQ		18	21
	Distance 39°			
	MZ 15 u 20 sec			
	MH 40 u 24 sec			
21	iP	17	24	04
	iS			13
	Distance 70 km.			
22	e(P)	09	28	34
23	eP	01	41	46
	eS		42	20
	Distance 300 km.			
23	iP	23	17	40
	e(S)		18	08

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Sept.26 iP 00 33 44
eS 34 16
Dilatation
Distance 270 km.

26 iP 17 02 12
ePP 33
eS 05 20
e 29
e(SSS) 06 01
Dilatation
Distance 17,5 °

26 iP 21 51 24
iS 30
Dilatation
Distance 50 km.

27 eP 02 16 32
e(S) 18 48
e 19 08

28 eP 02 20 00
local

28 iP 05 25 57
eS 26 07
Dilatation
Distance 85 km.

28 eP 08 06 00
eS 07 20
Distance 750 km.

28 eP 16 24 01
eS 48
Distance 420 km.

29 iP 06 31 39
eS 34 40
eScS 43 31
Dilatation from N
Distance 17°

29 iP' 11 37 44
epP' 39 24
e(SKKS) 47 15
e(SKKP) 52
eSS 12 00 00
eSSS 02 16
Distance 151°
Depth 400 km.

Sept.29 iP . 21 41 35
iS 48
Compression from SE
Distance 100 km
MZ 20 u
MH 100 u

29 iP 22 12 54
iS 13 11
Distance 140 km
Compression from N E

30 eP 07 39 04
eS 40 44
eR 41 28
e 49 16
Distance 940 Km
MZ 20 u 13 sec.

30 eP 14 46 00
e 19
eS 47 04
e 30
Distance 590 km.

Oct. 2° eP 07 12 (26)
eS 15 40
Distance 18°

2° iP 11 57 46 A
iS 12 01 00
Compression from W
Distance 18°
MH 80 u 14 sec.
MZ 18 u 16 sec.
Magnitude $5\frac{1}{4}$ - $5\frac{1}{2}$

3 eP 05 12 14
eS 13 (28)

3 eP 05 13 26

4 eP 03 16 51
eS 18 18
Distance 820 km.

6 eP 16 18 04
eS 19 32
Distance 830 km.

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Sept.26 iP 00 33 44
eS 34 16
Dilatation
Distance 270 km.

26 iP 17 02 12
ePP 33
eS 03 20
e 29
e(SSS) 06 01
Dilatation
Distance 17,5 °

26 iP 21 51 24
iS 30
Dilatation
Distance 50 km.

27 eP 02 16 32
e(S) 18 48
e 19 08

28 eP 02 20 00
local

28 iP 05 25 57
eS 26 07
Dilatation
Distance 85 km.

28 eP 08 06 00
eS 07 20
Distance 750 km.

28 eP 16 24 01
eS 48
Distance 420 km.

29 iP 06 31 39
eS 34 40
eSeS 43 31
Dilatation from N
Distance 17°

29 iP' 11 37 44
epP' 39 24
e(SKKS) 47 15
e(SKKP) 52
eSS 12 00 00
eSSS 02 16
Distance 151°
Depth 400 km.

Sept.29 iP 21 41 35
iS 48
Compression from SE
Distance 100 km
MZ 20 u
MH 100 u

29 iP 22 12 54
iS 13 11
Distance 140 km
Compression from N E

30 eP 07 39 04
eS 40 44
eR 41 28
e 49 16
Distance 940 Km
MZ 20 u 13 sec.

30 eP 14 46 00
e 19
eS 47 04
e 30
Distance 590 km.

Oct. 2° eP 07 12 (26)
eS 15 40
Distance 18°

2° iP 11 57 46
iS 12 01 00
Compression from W
Distance 18°
MH 80 u 14 sec.
MZ 18 u 16 sec.
Magnitude $5\frac{1}{4}$ - $5\frac{1}{2}$

3 eP 05 12 14
eS 13 (28)

3 eP 05 13 26

4 eP 03 16 51
eS 18 18
Distance 820 km.

6 eP 16 18 04
eS 19 32
Distance 830 km.

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Oct. 7 iP' 15 37 51
e 38 08
ePP 40 21
ePKS! 41 17
eSKKS 47 07
eSS 58 01
eSSS! 16 03 16
eQ! 14 01
eR 20 37
Distance 136°
Magnitude $6\frac{1}{2}$ - $6\frac{3}{4}$
RZ 12 u 20 sec
RH 16 u 24 sec
RH 25 u 56 sec

7 eP 20 08 53
eS 15 02
eQ 18 11
eR 19 49
Distance 41°
MZ 10 u 20 sec
MH 20 u 20 sec
Magnitude $5\frac{1}{2}$ - $5\frac{3}{4}$

8 eS 02 09 08
eSS 13 00
eQ 15 22
eR 18 10
Distance 59 °

8 iP' 06 11 56
i 12 52
i 16 00
e 36
e 19 44
e! 22 20
e! 26 32
e 27 08
eSS 31 00
eSSS 36 08
e! SSS 43 10
P'Z 4 u 8 sec.

8 eR 21 58 28

9 e 09 44 28
e 59 38
e 10 01 04

10 eP 23 29 50
eS 30 58
Distance 650 km.

Oct.13 eP' 15 12 06
ePKS 15 36
e(PPS) 27 32
eSS 32 32
e! 33 24
eSSS 37 28
e 41 12
eQ 49,2
eR 57 10
Distance 136°
Magnitude 6 $\frac{1}{4}$
MH 11 u 20 sec
MZ 8 u 20 sec

14 iP 17 49 46
e 50 09
eS 48
Distance 570 km.
MZ 50 u 2 sec
MH 100 u 2sec

14 ePP 21 39 42
ePS 49 36
eSS 56 32
eSSS 22 01 00
eQ 10 28
eR 15 36
Distance 125°

17 iP 13 40 28
eS 43 40
Compression
Distance 17,5°

17 eP 15 53 00
ePP or PcP 55 00
eS 59 00
eQ 16 01 36
Distance 39.5°

17 eR 22 40 02

19 eP 10 40 (18)
eS 47 06
eQ 50 44
eR 53 28
Distance 46°

20 e 11 34 34
e 40 04
e(Q) 52 08
e(R) 57 28

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Oct. 21 eP 10 03 54
e 05 52
local

21 eP 13 45 43
local

22 e 08 49 18
ePS 51 00
eSS 57 14
eSSS 09 01 16
eQ 08 04
eR 15 04
Distance 114°

25 eP 12 17 (20)
eS 19 28
Distance 12° ?

26 iP 08 12 51
iS 13 00
Distance 65 km.

26 iP 14 48 20
iS 43
Compression from N
Distance 190 km.

26 e(P) 16 39 17
eS 40 (52)

27 e(S) 05 38 40
eQ 41 38
eR 44 00

28 e 04 45 12
e 47 32
e 54 08
el 06

28 eP' 13 37 28
ePP 40 37
ePKS 41 02
eSKKS 47 12
eSKSP 50 36
eSS 58 48
eQ 14 15 40
eR 23
Distance 142°
Deeper than normal ?

28 iP 19 17 40
iS 50
Distance 80 km.

Oct.28 e 22 59 52
e 23 03 28
e 12 54
e 13 34
eR 40 44

29 eQ 04 44 40
eR 47 44

29 eP 09 50 45
ePKS 10 01 10
eS 40
eSS 07 48
eSSS 11 20
eQ 15 12
eR 19 44
Distance 91°

30 eP 12 16 55
e 18 40
eS 52
Compression from SW
Distance 10.5°
MH 150 u 12 sec.
MZ 100 u 12 sec.

30 eP 21 35 19
e 36 58
eS 37 22
Distance 10.5 °
MZ 16u 8 sec
MH 50u 6 sec

Nov. 1° eP 06 25 12
1960 eS 33 08
e(SKSP) 22
eSS 36 40
eQ 38 40
eR 42 08
Distance 57.5°

1° iP 08 47 28
eS 48 32
Compression from SW
Distance 600 km.
Magnitude $6\frac{1}{2}$ - $6\frac{3}{4}$
PZ 15 u 12 sec.
PH 50 u 12 sec
MZ 110 u 12 sec
MH 150 u 12 sec
Felt from Santiago to Pto. Montt.

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Nov. 1°	eP	10	48	43
	eS			49
	Distance 50 Km			
1°	eP.	12	30	58
	eS		32	05
	e			34
	Dilatation from SW			
	Distance 630 km			
1°	eP	15	52	(24)
2	ePP	17	34	00
	e			20
	ePS		43	28
	e		48	
	eQ	18	00	16
	eR		06	16
	Distance 111°			
5	iP	14	34	18
	eS			35
	Distance 130 Km			
5	eP	18	31	06
	eS		32	34
	Distance 240 km.			
6	eP	03	52	03
6	eP	04	30	05
6	eP	04	57	04
6	eR	05	44	00
6	eP	06	27	28
	eQ		50	(40)
	eR		54	08
	Distance 89°			
8	eP	20	41	35
	e(S)		43	(02)
9	eP	01	20	20
	e(S)		23	00
9	iP	03	25	32
	e		31	02
	eS			24
	e		34	16
	eR			40
9	e	11	31	42
	e		38	52
	eQ		56	16

Nov.9	eP	20	08	41
	i		10	09
	eS			38
	e(SSS)			48
	eR		11	00
	Distance 10°			
	MZ 80 u 12 sec.			
	MH 120 u 8 sec.			
10	eP	05	51	32
10	e	15	07	30
	e		24	28
	e		40	00
	e		42	30
10	eP	17	21	40
10	eP	18	00	(52)
10	eP	19	53	36
	e(S)		54	40
11	eP	03	35	01
11	iP	07	52	23
	eS			49
	Dilatation			
	Distance 220 km.			
11	eP	15	22	32
	e(S)		24	00
12	eP	08	30	40
	e(S)		32	01
	Distance 760 km.			
12	iP	08	38	38
	eS		39	48
	Distance 650 km.			
13	eP'	06	56	33
	eSKKS$_1$	07	06	28
	eSKSP		09	52
	eSS		19	00
	(eQ)		34	46
	Distance 146 °			
13				

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Nov. 13	eP'	29	39	24	Nov.20	eP	22	07	48
	ePP		40	51		i		08	29
	ePKS		42	56		eS		12	40
	ePPP		43	28		e(R)		14	10
	eSKS		46	21		Distance 30.5°			
	ePS		50	38		MH 110 u 18 sec			
	eSS!		57	18		MZ 110 u 18 sec			
	eSSS	10	01	04					
	eQ!		10	56	22	e(P)	02	38	12
	eR-		16	08		e(S)		43	05
	Dist. 121°					eR		45	20
	SSH 23 u 32 sec								
	QH 30 u 42 sec				22	e	04	08	33
	MH 20 u 16 sec					eR		12	44
	RZ 20 u 16 sec				22	eR	07	04	00
	Magnitude $6\frac{1}{2}$ - $6\frac{3}{4}$				22	eP	09	05	46
14	iP	16	38	40		local			
	local				22	iP	12	30	41
15	e	06	42	20		eS		32	04
	eR		49	12		e			16
15	eP	14	47	56		e			38
	e(S)		49	24		Compression from S			
	Distanca 830 km					Distance 760 km.			
15	eP	17	09	59		Magnitude $6\frac{1}{2}$ - $6\frac{3}{4}$			
	eS		11	10		PZ 3.5 u 6 sec			
	Distance 620 km					PH 8 u 8 sec			
15	i(P)	20	32	59		MZ 130 u 16 sec			
						MH 130 u 14 sec			
17	iP	01	30	.00	23	eP	14	25	18
	i			10		e		26	00
	i			18		ePP		28	52
	eS		31	10		eSKS		35	42
	Distance 660 km					eS			52
17	eP	05	18	38		ePS		37	26
	i			49		eSS		42	00
	e(S)		21	00		eQ		48	40
	e			52		eR		53	12
17	e(P)	21	37	00		Distance 91°			
	e		40	00		MZ 20 u 20 sec.			
	e(S)			16		MH 35 u 20 sec.			
						Magnitude $6\frac{1}{2}$			
18	eP	12	45	16					
	eS		47						

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PROVISIONAL READINGS

(Santa Lucía)

Dic. 1960

1° eQ 08 58 36

1° e 21 14 40
e 52
e 21 24
eQ 31 20

2 eP 09 12 52
e 13 00
iS 14 42
e 50
Distance 10°
MZ 130+u 9 sec
MH 130+u 9 sec
Magnitude 6½ - 6¾

2 eP 09 39 (54)
e 41 29
eS 40
MZ 130 u
MH 11[illegible]+u
Disturbed by preceding

3 iP' 04 44 25
e 45 39
eP' 46 19
ePP 49 28
e 36
ePS! 05 00 00
ePPS 03 16
eSS 05 10 36
eSSS 15 44
eR 36 --
Compression
Distance 170°
Deeper then normal
P'Z 3,5 u 10 sec
MH 20 u 20 sec
MZ 15 u 20 sec
Magnitude 6½ - 6¾

6 eP 08 59 01
ePP 18
e 35
eS 09 01 03
e 28
Distance 10°,8
MZ 40 u 5 sec
MH 80 u 5 sec
Magnitude 6 - 6¼

Dic. 1960

6 iP 11 07 10
iS 20
Distance 80 km.

8 iP 11 20 39
iS 21 00
Dilatation from N E
Distance 170 KM
PZ 10 u 2 sec
PH 10 u 3 sec

13 eP 07 48 (48)
e 49 12
iS 59 39
eSS 08 05 14
eSSS 08 32
eQ! 11 40
eR 15 24
Distance 88°
QH 22 u 48 sec
RZ 15 u 18 sec

13 eP 10 48 30
eS 49 26
eR 50 07
Distance 510 km.

15 e 00 33 10
e 38 36
e 45 44
e 52 20

19 eP 13 24 50
eS 26 04
Distance 690 km.

22 eP 03 51 18
ePP 32
ePPP 48
eS 54 31
Distance 17°,5

22 eSKS or S 06 56 18
eSS 07 00 16
eQ 06 --
eR 10 20

22 iP 12 22 12
iPPP 25
iS 42
i 45
Distance 260 km
MH 35 u

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PROVISIONAL READINGS
(Santa Lucía).

Dic. 1960				
22	eSKS or S	14	35	28
	eSS		41	24
	eR		51	32
	Distance 85°			
23	e(S)	15	57	20
	Local			
25	iP	04	07	48
	iS			58
	Distance 80 km.			
25	e(S)	17	39	08
	local			
26	eSKS or S	01	19	40
	e		20	52
	e		21	52
	eSS		26	00
	eQ		32	52
	eR		37	38
	Distance 90°			
26	e(P)	04	40	10
	e			35
	e		42	02
	e(S)		45	30
	e(R)		48	10
	e		51	--
27	e	10	57	36
	eS or SKS		59	08
	eSS	11	05	32
	eSSS		08	48
	eQ		12	04
	e(R)		18	--
	Distance 91°			
27	iP	18	14	25
	ePPP			59
	iS		18	15
	e			24
	Dilatation from N			
	Distance 21°,5			
29	iP	10	39	32
	eS		41	46
	eR		43	02
	Compression from SW			
	Distance 12°,3			
	Magnitude 6¼ - 6½			
	PZ 4,5 u 12 sec			
	PH 10 u 12 sec			
	MZ 11½ u 11 sec			
	MH 10½ u 11 sec			
29	eP	19	05	08
	ePP			20
	eS		07	58
	eR		09	00
	Distance 15°,5			
29	e	20	37	40
	e		38	12
	e		39	40
29	e	21	38	00
30	eP	11	31	(16)
	eS		32	(08)
31	eP	11	21	(12)
	eS		23	(52)
31	eP	18	10	48
	eS		13	00
	e			04
	eSS			16
	eR			52
	Compression from SW			
	Distance 11°,5			
	MZ 27 u 12 sec			
	MH 30 u 12 sec			

NOTICE:
This Bulletin is discontinued as of January 1, 1961. Santiago readings are sent by teletype to USCGS Washington, and are published in the Anuario of the Institute.

Publication of the Air Mail Bulletins will be resumed if there is sufficient demand from foreigh stations to justify the expense.

C. Lomnitz
Director.